

Specific information concerning the distribution of fish species and conditions of aquatic habitats is largely lacking or may be outdated at many NWRs. Assessments of the potential effects of climate change and confidence in the effects of various management actions conducted in the past or potentially implemented in the future would be improved with recent fish and aquatic habitat information.

The CRFPO proposes to apply a fish and aquatic habitat survey approach, adapted from methods recommended by the Bull Trout Recovery Monitoring and Evaluation Technical Group (RMEG), to stream habitats in the Rock Creek and Guano Creek drainages at Hart Mountain NWR and the Virgin Creek and Fish Creek drainages at Sheldon NWR. Objectives are to document fish presence and characterize aquatic habitats. These NWRs were selected due to lack of recent fish information and absence of Federally listed fishes (except perhaps Lahontan cutthroat trout in Virgin Creek), which would require additional authorization to take. We anticipate training one or two crews (i.e., depending on ultimate scope of surveys—both NWRs and drainages or a subset), each consisting of two students, to conduct surveys using backpack electrofishing units and appropriate field equipment during summer 2011 (June-August).

Estimated Budget:

Item	Amount
Personnel	
2-person crew (6 pay periods @\$3,000/pay period)	\$18,000 (\$36,000 two crews)
Supervisor (1 pay period @ \$5,063/pay period)	\$5,063
Equipment	
Waders, boots, gloves, repair materials (\$500/person)	\$1,000 (\$2,000 two crews)
Misc. field items (e.g., maps, note pads, etc.)	\$500 (\$1,000 two crews)
Backpack electrofishing unit and supplies (batteries, chargers, probes, dipnets) ¹	\$10,000
Travel	
Field vehicle (estimate 700 mile round trip twice a month (anticipate 10 day on/4 day off schedule) @ \$0.30/mile and \$290/month GSA fee)	\$2,130 (\$4,260 two crews)
Per diem (camping rate, 60 days @ \$25/person day) ²	\$3,000 (\$6,000 two crews)
Total	\$39,693 (\$64,323 two crews)

¹ Anticipate at least one unit will be available, new unit to be used either as backup or for second crew, and would be dedicated to NWR use for surveys at other NWRs in the future.

² Charge code required due to CRFPO travel limitation.